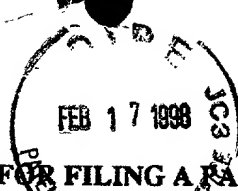


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PTO/SB/14 (6-95)  
Approved for use through 05/31/96. OMB 0651-0033  
Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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518

REQUEST FORM FOR FILING A PATENT APPLICATION UNDER 37 CFR 1.62

DOCKET NUMBER	ANNUAL CLASSIFICATION OF THIS APPLICATION CLASS SUBCLASS	PRIOR APPLICATION EXAMINER	ART UNIT

Address to:  
Assistant Commissioner for Patents  
Box FWC  
Washington, D.C. 20231

GROUP 3300

This is a Request for filing a ☒ continuation-in-part, ☐ continuation, ☐ divisional application under 37 CFR 1.62 of prior application Number 08 / 619,984 filed on 03/21/96 entitled Techniques To Create

Targeted Lottery Systems Using Electronic Media. by the following named inventor(s):

FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
	Schoen	Neil	C.
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	Gaithersburg	Maryland	U.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE / COUNTRY
	9817 Freestate Pl	Gaithersburg	MD 20879
FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE / COUNTRY
FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE / COUNTRY

☐ Additional inventors are being named on separately numbered sheet(s) attached hereto.

The above identified prior application in which no payment of the issue fee, abandonment of, or termination of proceedings has occurred, is hereby expressly abandoned under 37 CFR 1.62(g) as of the filing date of this new application. Please use all the contents of the prior application file wrapper, including the drawings, as the basic papers for the new application. (No new specification is required, 37 CFR 1.62(e).) (Note: 37 CFR 1.60 may be used for continuation or divisional applications where the prior application is not to be abandoned.)

- ☐ Enter the unentered amendment previously filed on \_\_\_\_\_ under 37 CFR 1.116 in the prior application.
- ☒ A preliminary amendment is enclosed.
- ☐ This application is being filed by less than all the inventors named in the application. The Commissioner is requested under 37 CFR 1.62(a) to delete the names of the following person or persons from the prior application who are not inventors of the invention being claimed in this application:

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS (37 CFR 1.16(d))	8 - 20 =	0	x \$ _____ =	\$ 0
	INDEPENDENT CLAIMS (37 CFR 1.16(b))	1 - 3 =	0	x \$ _____ =	0
	MULTIPLE DEPENDENT CLAIMS (if applicable) (37 CFR 1.16(d))	0		+ \$ _____ =	0
				BASIC FEE (37 CFR 1.16(e))	+ 790
				Total of above Calculations =	790
				Reduction by 50% for filing by small entity (Note 37 CFR 1.9, 1.27, 1.28).	395
				TOTAL =	395.

jc491 U.S. PTO  
02/17/98

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(REQUEST FORM FOR FILING A PATENT APPLICATION UNDER 37 CFR 1.62, Page 2)

4. ☒ A verified statement to establish small entity status under 37 CFR 1.9 and 1.27  
☐ is enclosed.  
☒ was filed in the prior application and such status is still proper and desired (37 CFR 1.28(a)).
5. ☐ The Commissioner is hereby authorized to charge fees under 37 CFR 1.16 and 1.17 which may be required, or credit any overpayment to Deposit Account No. \_\_\_\_\_ . (A duplicate copy of this form is enclosed.)
6. ☒ A check in the amount of \$ 395. is enclosed.
7. ☒ A new oath or declaration in compliance with 37 CFR 1.63 is included since this application is a continuation-in-part which discloses and claims additional matter.
8. ☒ Amend the specification by inserting before the first line the sentence:  
This application is a ☒ continuation-in-part, ☐ continuation, ☐ division, of application number 08 / 619,984, filed 03/21/96, now abandoned.
9. ☐ Priority of foreign application number \_\_\_\_\_, filed on \_\_\_\_\_ in (country) \_\_\_\_\_ is claimed under 35 U.S.C. 119(a) - (d).
10. ☐ The prior application is assigned of record to \_\_\_\_\_
11. ☐ The power of attorney in the prior application is to: (name & address) \_\_\_\_\_
12. ☒ Also enclosed: A preliminary amendment to claims and specification

Address all future correspondence to: (May only be completed by applicant, or attorney or agent of record)

Neil C. Schoen


9817 Freestate Place

Gaithersburg, MD 20879

It is understood that secrecy under 35 U.S.C. 122 is hereby waived to the extent that if information or access is available to any one of the applications in the file wrapper of a 37 CFR 1.62 application, be it either this application or a prior application in the same file wrapper, the Patent and Trademark Office may provide similar information or access to all the other applications in the same file wrapper.

02/17/98

Date



Signature

Neil C. Schoen

Typed or printed name

- ☒ Inventor(s)  
☐ Assignee of complete interest  
☐ Attorney or agent of record  
☐ Filed under 37 CFR 1.34(a)  
Registration number if acting under 37 CFR 1.34(a): \_\_\_\_\_



*Copy of Original Application  
(filing date 3/21/96)*

**TITLE:**                   **TECHNIQUES TO CREATE TARGETED  
LOTTERY SYSTEMS USING ELECTRONIC  
MEDIA INTERFACES**

**NAME OF  
INVENTOR:**           **Neil C. Schoen**

**CITIZENSHIP:**       **U.S.A.**

**RESIDENCE:**       **9817 Freestate Place  
Gaithersburg, Maryland 20879**

03-25-94-024299

## BACKGROUND

Lottery systems have become commonplace, as a result of changes in state laws, which has led to proliferation of outlets at which one can purchase lottery tickets. Currently, many state and local governments now offer lottery purchases via machines at freeway stops, commercial enterprises (e.g., local grocery stores, tobacco shops, etc.) as well as at state/local government sponsored outlets. The present lottery distribution systems lack specificity for targeting resources to users of state systems, such as transportation and health care, for example; they depend on government allocation of general lottery revenues.

The present invention allows lottery revenues to be collected from the users of these state/local services, which typically are subsidized by tax revenues, and always in need of additional resources. With the advent of electronic fare/collection systems, the opportunity to selectively access the user population now exists. The application of this new technology to provide additional resources to state and local services via lottery processes will be described in this patent specification and associated claims.

## SUMMARY OF THE INVENTION

The substance of the present invention is to allow a user-selected lottery option with minimal perturbations to the cost and efficiency of operation of currently established service delivery systems. This description will focus on modern metro-rail transportation, but this concentration is not intended to limit the scope of this invention.

The essential innovation is the selection and encoding of a random number sequence on the magnetic/electronic media (e.g., fare card). When the media is presented to a redemption device, the encoded random number can be checked against selected winning numbers to determine if a particular media article presented for redemption is a winning item. Depending upon the traffic volume, options for user-selected sequences can be provided, but will slow down the system throughput since the purchaser will require more time to manually select a number.

Another key feature of the present invention is the ability to work with existing systems with minimum modifications. Current magnetic strip fare card machines have the ability to encode time, location and monetary values as part of the process of automatically recording the change in fare card value based on the entry/exit locations and the time of the day (the Washington DC metro-rail system is a good example). A simple modification to the fare purchase hardware system can enable additional funds to be collected for a lottery option and a suitable code number to be written on the fare card magnetic strip. Redemption of the fare cards can be accomplished after exit at separate machines, at the traveler's convenience (so as not to delay travelers not using the lottery option).

This invention is not limited to magnetic fare card systems. Any system that requires a ticket or card can be adapted for lottery use. For example,

parking lot tickets, credit cards, show tickets or any system that collects cash in exchange for a receipt can be modified according to this invention.

## DESCRIPTION OF THE DRAWINGS

Fig. 1 shows selection and redemption methods for magnetic fare card systems with a separate redemption machine that interrogates fare cards after the holder exits the destination station.

Fig. 2 illustrates an optional configuration in which the holder can select a lottery option after exiting the destination station by adding cash and redeeming at that same machine, which utilizes a random selection process based on the number of players registered (similar to a slot machine pay-off based on traffic history).

Fig. 3 shows a selection and redemption method for credit card purchases at a cash register type device, with a redemption system using mail notification based on the number of players.

Fig. 4 shows a selection and redemption system based on computer purchases, with redemption accomplished by computer e-mail or mail notification.

## DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

One of the most suitable government systems for implementing a lottery option is the modern metro-rail system (such as those in Washington, DC and San Francisco, CA). A description of the invention tailored to this type of transportation system is as follows.

Figure 1 shows a schematic diagram of a current metro-rail fare card selection system, as modified to provide a lottery feature according to this invention. A mechanical device **2** accepts money (bills/coins) currently set up to create a credit balance against which transportation costs are deducted. The amount of money entered appears on an LED display **4**. Normally the transaction complete button **10** is pushed and a fare card is issued with the designated credit, and is ejected from the machine by a slot **6**. The device is modified to provide a lottery option button **8** which when pushed allows additional money to be inserted to be credited toward the lottery purchase, which is entered when the transaction complete button **10** is pushed. The card is ejected via device slot **6** as before. Only this card now can have a lottery number encoded, along with the information on the amount of additional money added for the lottery wager.

In normal use, the card is inserted in a "turnstile" type machine at the entry and exit stations, and the appropriate fare is deducted and the fare card returned with the new credit balance, based on the entry and exit station and time of day (for rush hour/non-rush hour charges). One variant of the present invention involves a separate redemption machine(s) (located at all stations) which would accept fare cards after the user has exited the station "turnstile" machine. As shown in Figure 1, the redemption machine has a card reader **12** similar to the selection machine reader/exit device **6**, but has an additional



feature of returning a winning ticket receipt **18** (if appropriate) as well as a deactivated card return **20**. The winning amount is shown on a display LED **16**.

An alternative configuration would not need a special selection modification, as shown in Figure 1 by the lottery option button **8**, but would accomplish the lottery selection at the redemption machine, as shown in Figure 2. Thus, no modification of the fare card is necessary, and winners are selected at the redemption machine based on a frequency formula similar to those used in slot machines.

Another variant of this invention can be used on credit card transactions, as shown in Figure 3. A typical credit card entry machine (with magnetic reader "swipe slot" **24**) and keyboard entry system **22** is shown as currently fielded (or as part of a more complex cash register feature found in department stores). A separate lottery option button **26** is pushed (or a sequence of normal numeric buttons to identify a lottery selection) to indicate the user has elected to make a wager. A random code sequence is appended to the entry which is used for selection of winning wagers. This selection of winners can be done at a central billing site, and the winners notified by mail **28**.

A third configuration or variant can be set up when the entry device is a computer **30** on a network, as shown in Figure 4. The hardware and software is modified to display a lottery option button **32** and wager amount, before the data is forwarded to the merchant. A similar coding process is used to identify a wager with a unique code sequence. Winning entries can be selected at a central site, and winners notified by E-mail **34** or letter **28**.

It should be noted that similar methods can be used to introduce lottery options to systems involving ticket purchases (movies, shows, etc.) and other transaction systems, and the systems described above are not intended to limit the scope of this invention.



## CLAIMS

What is claimed is:

1. A technique for providing the capability to supplement mass transit services and purchasing systems revenues by addition of electronic lottery processes and operations, which utilize minor modifications to existing hardware and software used to operate these public systems and invoice customers, which includes:

- means for electronically identifying and redeeming customer invoicing media, such as fare cards, tickets, credit cards and credit card bills to provide predetermined payouts to winning lottery customers;

- software means to select winning customers and the amount of money to be awarded;

- means to ensure the security and integrity of said lottery processes and operations to prevent fraudulent use of invoicing media to obtain said payouts of lottery funds.

2. A system according to claim 1 wherein the mass transit service system to be upgraded for a lottery operation is a metro-rail or metro-bus system which employs magnetic fare cards purchased via electro-mechanical machines, modified with said means for electronically identifying and redeeming customer invoicing media to accept additional funds and marking techniques necessary to operate said lottery processes.

3. A system according to claim 1 wherein the mass purchasing system is a large consumer products cash register network, such as found in department store chains, which employs magnetic stripe/manual entry credit card order

entry machines, modified with said means for electronically identifying and redeeming customer invoicing media to accept additional funds and marking techniques necessary to operate said lottery processes.

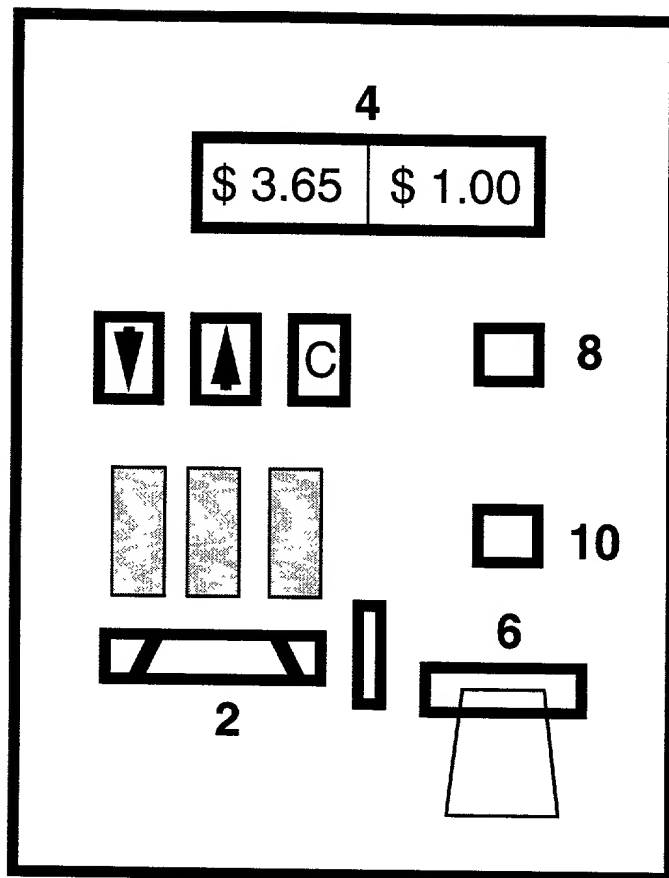
4. A system according to claim 1 wherein an Internet system, such as an on-line service or corporation with a large Internet marketing service, is modified with said means for electronically identifying and redeeming customer invoicing media to accept additional funds and marking techniques necessary to operate said lottery processes.

5. A system according to claim 1 wherein parking lots, theaters and sports arenas modify their ticketing systems using said means for electronically identifying and redeeming customer invoicing media to accept additional funds and marking techniques necessary to operate said lottery processes.

## **ABSTRACT OF THE DISCLOSURE**

A system to encode lottery numbers onto magnetic strip cards used as fare cards for public transportation systems. The system is activated by user selection of a lottery option and increased payment at the time of the fare card purchase, or altered after purchase in a separate hardware system. A second unit determines those cards that will be selected for payout (e.g., winning cards). The system is designed to provide additional revenue to replace/reduce government subsidization of public transportation, by collecting additional revenues from that portion of the population that uses the transportation system and opts to participate in the lottery. Most services provided by an electronic media interface (e.g., fare card, credit card, ticket, computer modem, etc.) can be modified to provide this targeted lottery feature.

## SELECTION



## REDEMPTION

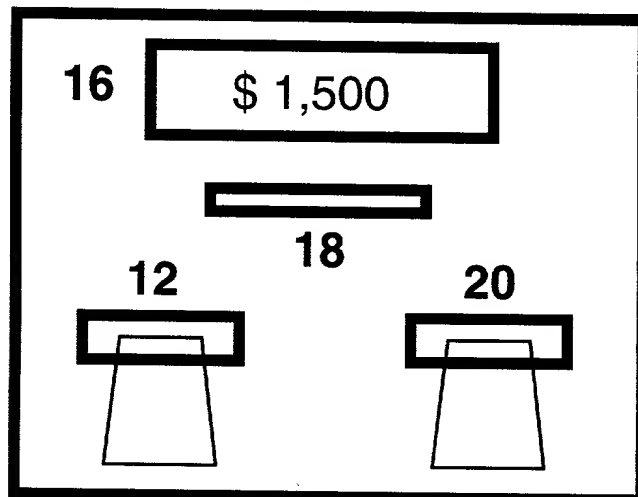


Figure 1

# REDEMPTION

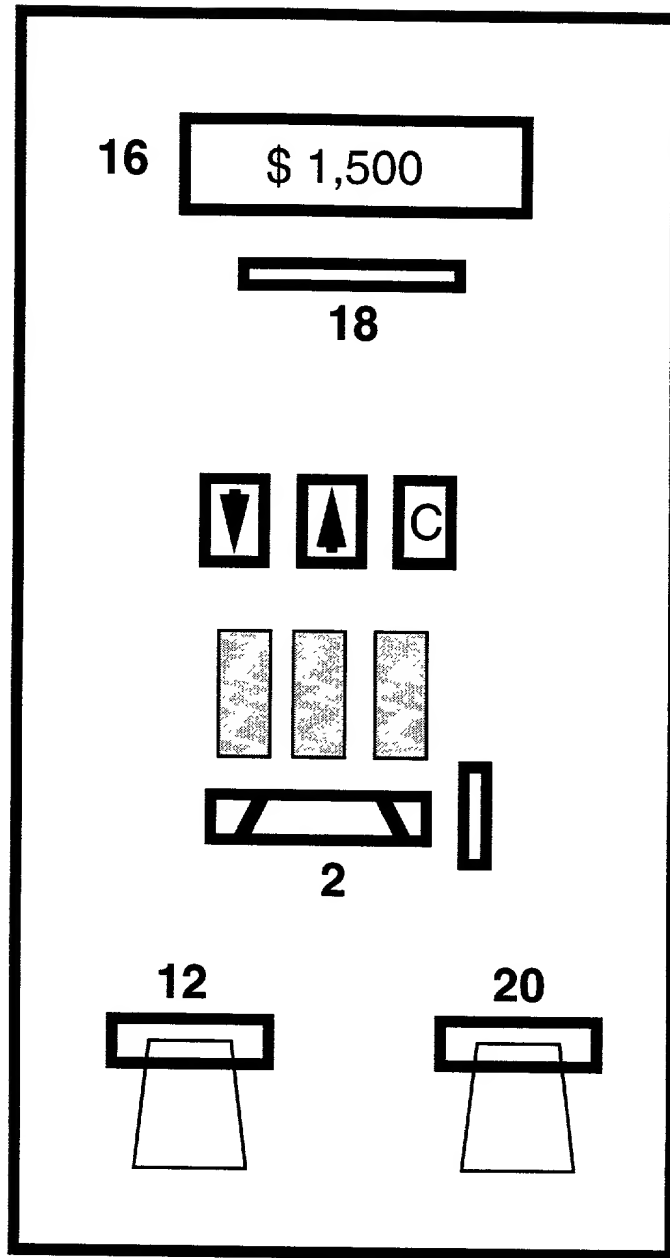


Figure 2

## SELECTION

4	\$28.13	\$1.00	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24

26

## REDEMPTION

28	<div><div></div><div></div><div></div></div> <div><input type="checkbox"/></div>
----	--

# Figure 3



SCANNED 6

## SELECTION

30

**NAME:**  
**ADDRESS:**  
**CREDIT CARD #:**  
**WAGER:**  
**ORDER #:**

**LOTTERY OPTION**

32

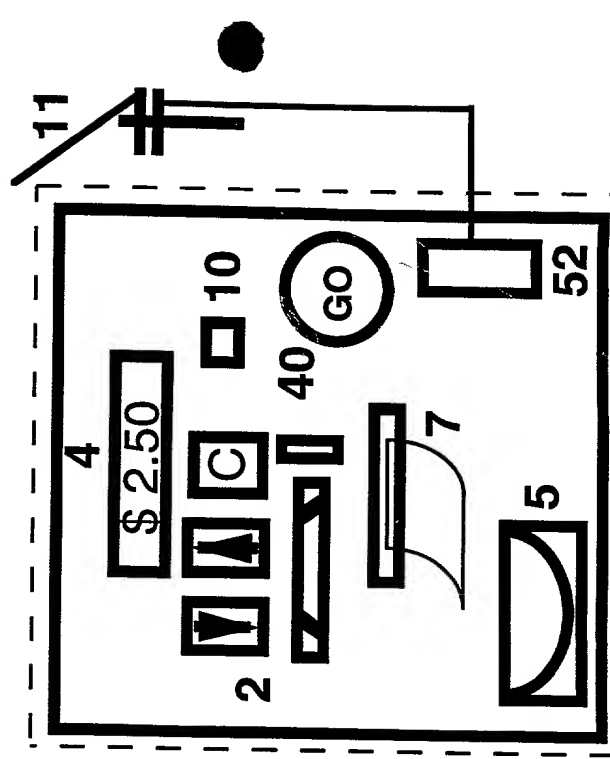
## REDEMPTION

28

34

**E-MAIL**  
**You Won!!**

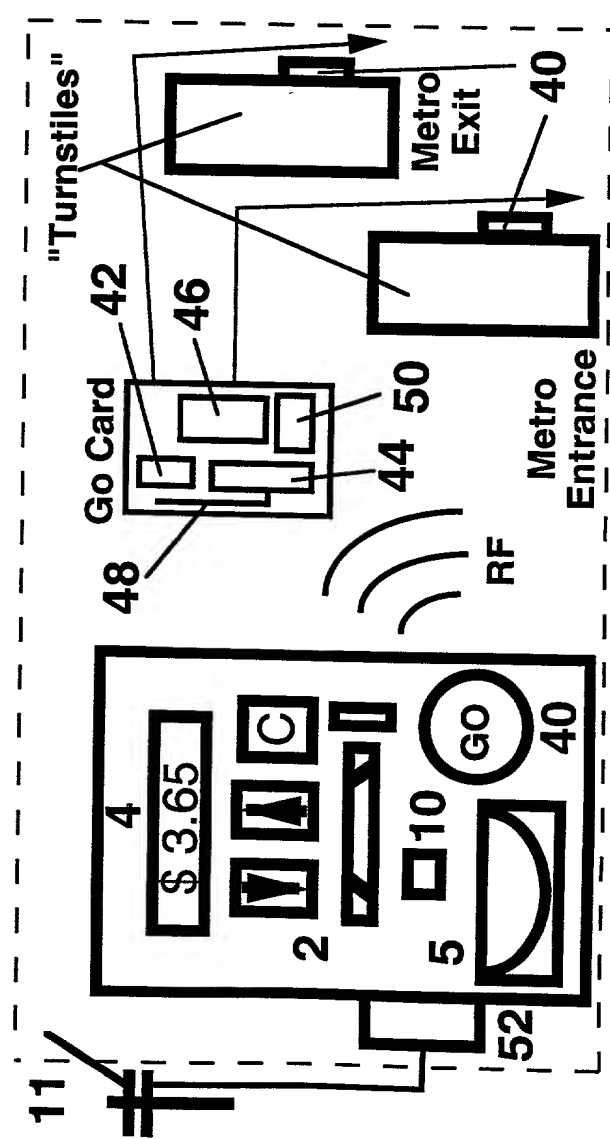
**Figure 4**



**New Lottery Machine** jc491 U.S. PTO  
09/296864



## Figure 5



## Planned "Go Card" System

542720 "43B35250

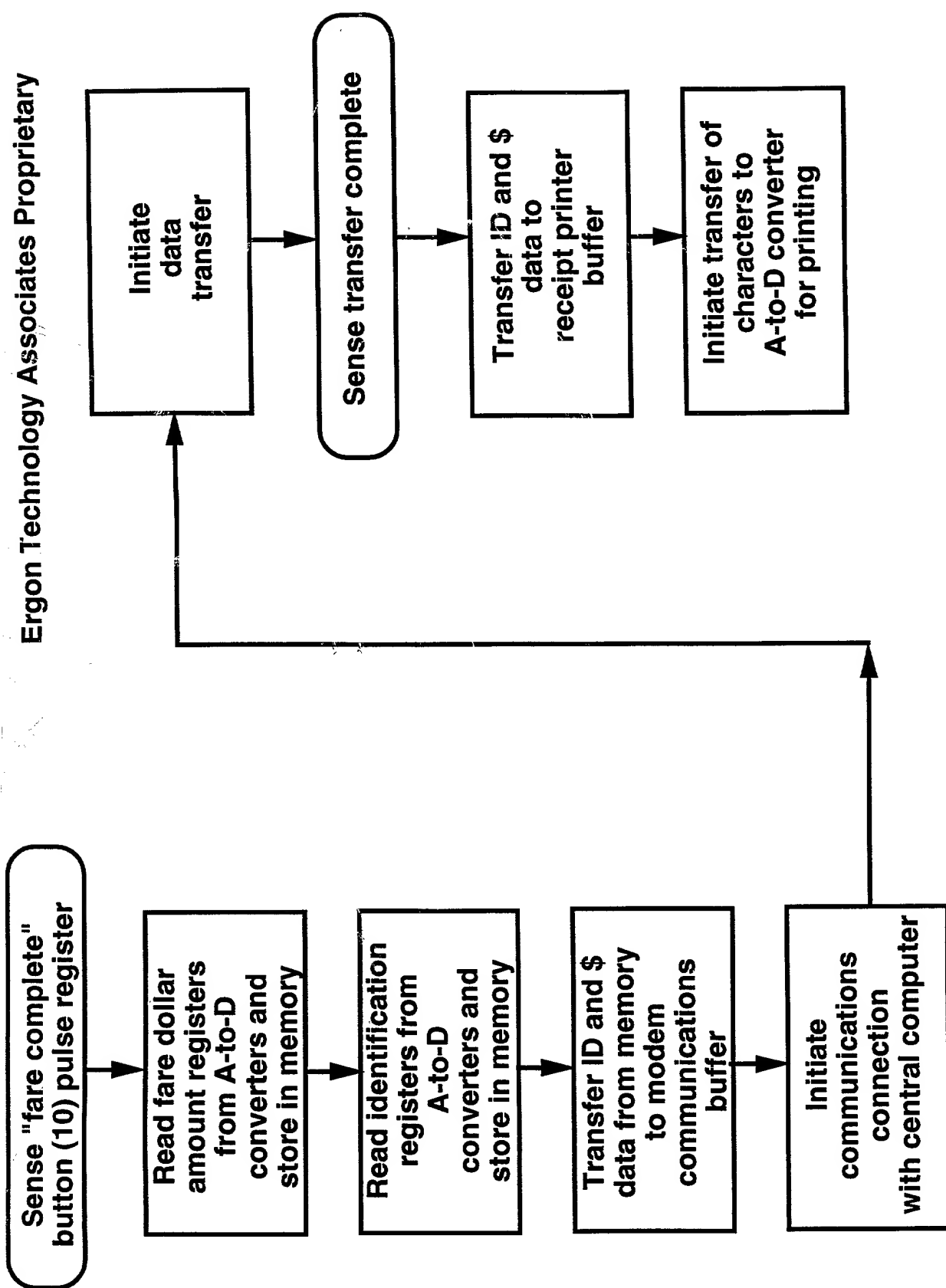


Figure 6



PTO/SB/01 (8-95)  
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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

## DECLARATION FOR PATENT APPLICATION

Docket Number (Optional)

As a below named inventor, I hereby declare that.

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

"Techniques To Create Targeted Lottery Systems", the specification of which is attached hereto unless the following box is checked: Using Electronic Media Interfaces"

☒ was filed on 03/21/96 as United States Application Number or PCT International Application Number 08/619,984 and was amended on 8/18/97, 2/17/98 (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Not Claimed

(Number)	(Country)	(Day/Month/Year Filed)
(Number)	(Country)	(Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

(Application Number)	(Filing Date)
(Application Number)	(Filing Date)

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112,

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application

(Application Number)	(Filing Date)	(Status -- patented, pending, abandoned)
(Application Number)	(Filing Date)	(Status -- patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

N/A

Address all telephone calls to Neil C. Schoen at telephone number 301-330-5484  
Address all correspondence to Neil C. Schoen  
9817 Freestate Place  
Gaithersburg, MD 20879

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor (given name, family name) Neil C. Schoen

Inventor's signature Neil C. Schoen Date 2/14/98

Residence Gaithersburg, Maryland Citizenship U.S.A.

Post Office Address 9817 Freestate Place  
Gaithersburg, MD 20879

Full name of second joint inventor, if any (given name, family name)

Second Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_ Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

☐ Additional inventors are being named on separately numbered sheets attached hereto.

Burden Hour Statement: This form is estimated to take .4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Sangeeta Kochhar  
SANGEETA KOCHHAR  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires December 18, 19